

NRC FORM 7 (4-2000)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0027		EXPIRES: 04/30/2003	
<b>APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT</b>  (See Instructions on Reverse)				Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records Management Branch (T-8 EC), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.			
1. APPLICANT'S USE <input type="checkbox"/>	2. DATE OF APPLICATION November 20, 2002	3. APPLICANT'S REFERENCE	4. NRC USE <input type="checkbox"/>	DOCKET NUMBER ML005384	LICENSE NUMBER XMAT0404		
5. APPLICANT'S NAME AND ADDRESS a. NAME SGL Carbon, LLC b. STREET ADDRESS (Facility Site) 8600 Bill Ficklen Drive c. CITY Charlotte d. STATE NC e. ZIP CODE 28256				6. SUPPLIER'S NAME AND ADDRESS (Complete if applicant is not supplier) a. NAME b. STREET ADDRESS c. CITY d. STATE e. ZIP CODE			
7. TELEPHONE NUMBER (Area Code - Number - Extension) (704) 593-5173				8. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (if known) N/A			
9. FIRST SHIPMENT SCHEDULED Please See Attachment A		10. FINAL SHIPMENT SCHEDULED Please See Attachment E		11. APPLICANT'S CONTRACTUAL DELIVERY DATE Please See Attachment C		12. PROPOSED LICENSE EXPIRATION DATE Please See Attachment D	
13. ULTIMATE FOREIGN CONSIGNEE a. NAME Please See Attachment E b. STREET ADDRESS (Facility Site) c. CITY d. COUNTRY				14. ULTIMATE END USE (include plant or facility name) Extruded, die-molded and isostatically molded artificial graphite, in rod and block form, provided as feed stock for further manufacturing of various commercial items 15a. DATE REQUIRED (See Attachment F)			
16. INTERMEDIATE FOREIGN CONSIGNEE a. NAME b. STREET ADDRESS (Facility Site) c. CITY d. COUNTRY				17. INTERMEDIATE END USE Non-nuclear end use 18a. DATE REQUIRED			
19. INTERMEDIATE FOREIGN CONSIGNEE a. NAME b. STREET ADDRESS (Facility Site) c. CITY d. COUNTRY				20. INTERMEDIATE END USE USE CODE 21a. DATE REQUIRED			
22. COM CODE		23. DESCRIPTION (include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)		24. MAX. ELEMENT WEIGHT		25. MAX. WT. %	
		Bulk, non fabricated artificial graphite produced by extrusion, die-molding and isostatic molding with a boron equivalent of less than five (5) parts per million (See Attachment G for further description)		11,617,833 L N/A		N/A	
26. COUNTRY OF ORIGIN - SOURCE MATERIAL N/A		27. COUNTRY OF ORIGIN - ENRICHMENT WHERE ENRICH OR PRODUCED N/A		28. COUNTRIES WHICH ATTACH SAFEGUARDS (if known) Please See Attachment E		29. MAX. ISOTOPE WEIGHT N/A	
30. ADDITIONAL INFORMATION ON CONSIGNEES, END USES, AND PRODUCT DESCRIPTION (Use separate sheet if necessary)							
31. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations; and that all correct to the best of his/her knowledge.							
32. AUTHORIZED OFFICIAL a. SIGNATURE T. M. Hoffman				b. TITLE President			

NRC FORM 7 (4-2000)

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This form was designed using Informa

\* Application updated to reflect additional information received from the applicants

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**Attachment A**  
**(Item 5—First Scheduled Shipment)**

SGL Carbon, LLC ("SGL") would like to resume shipping its products as soon as possible. Until recently, SGL regularly shipped products to its affiliates in Europe, and directly to end users in other countries. In fall 2002, SGL recognized that Nuclear Regulatory Commission (the "Commission") regulations might require it to seek a specific license to continue these exports. SGL immediately stopped exporting bulk, nuclear grade graphite. Following an internal investigation, SGL made a telephone disclosure regarding its possible past noncompliance to the Commission in mid-November 2002. SGL will file a written disclosure shortly.

SGL has not resumed exporting activity since it learned of its possible noncompliance with Commission regulations. Continued stoppage could prove detrimental to SGL's business. Therefore, SGL asks that the Commission permit it to resume exporting to its European affiliates set forth on the attached organization chart, and the countries listed in Attachment E as soon as a specific license is issued.

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**Attachment B**  
**(Item 6—Final Scheduled Shipment)**

SGL does not have a final scheduled shipment date. The nature of SGL's business demands routine shipments to various locations. The company does not foresee a certain date upon which the need for regular shipments would change. Therefore, SGL asks that no final shipment date be required.

**Attachment C**  
**(Item 7—Applicant's Contractual Delivery Date)**

SGL stopped exporting in fall 2002, and would like to resume these activities as soon as possible.

**Attachment D**  
**(Item 8—Proposed License Expiration Date)**

SGL requests that the term of the specific license be indefinite. By its nature, SGL's business requires regular shipments to various locations. Title 10 of the Code of Federal Regulations, Part 110.32 permits an application for a specific license to cover multiple shipments. Thus, SGL proposes that the Commission issue this license for an indefinite period. If the Commission considers it necessary, the license could be deemed to expire upon SGL's dissolution. Alternatively, SGL asks that the license automatically renew year to year.

**Attachment E**  
**(Item 10—Ultimate Foreign Consignee)**

SGL proposes that this license permit it to export nuclear grade graphite to the following countries:

1. The countries of the European Communities:

Austria*	Italy*
Belgium*	Luxembourg*
Denmark*	The Netherlands*
Finland*	Portugal*
France*	Spain*
Germany*	Sweden*
Greece*	United Kingdom*
Ireland*	

2. Mexico and certain countries of South America:

✓ Mexico	✓ French Guyana
✓ Argentina*	✓ Guyana
✓ Bolivia	✓ Paraguay
✓ Brazil*	✓ Peru
✓ Chile*	✓ Suriname
✓ Colombia	✓ Uruguay
✓ Ecuador	✓ Venezuela

3. Other Countries

✓ Australia*	✓ New Zealand*
✓ China	✓ Norway*
✓ Czech Republic*	✓ South Africa*
✓ India	✓ Singapore
✓ Japan*	✓ Taiwan
✓ Republic of Korea*	✓ Thailand
✓ Malaysia	

\* This country is a member of the Nuclear Suppliers Group.  
CLT 657975v1

## Attachment F (Item 11—Ultimate End Use)

Until recently, SGL routinely shipped extruded, die-molded and isostatically molded artificial graphite, in rod and block form to Europe and other locations. The foreign consignees utilize the graphite as feed stock for further manufacturing of various commercial items such as the following:

Vanes, rotors, seal rings, metal sleeved rings, piston rod seals, piston rod bearings, bearings, packing rings for compressors and vacuum pumps;  
Large sized blanks, crucible-type molds for near-net-shape centrifugal casting;  
Ingot molds for die casting processes;  
Casting molds for e.g. railway rolling stock wheel casting;  
Graphite plates for cooling of complex grey iron shapes;  
Large sized blanks, graphite dies and plates for continuous casting, crucibles in large sizes for melting and holding processes in continuous casting machines;  
Electrodes for aqueous and organic electrosynthesis;  
Anodes for corrosion protection of pipe lines;  
Mechanical seals for automotive sealing;  
Graphite jigs for semiconductor encapsulations, glasswork and brazing connections;  
Graphite anodes and cathodes for chlorine-alkali electrolysis, decomposer graphite granules for mercury cells;  
Parts of high purity graphite, used in equipments for pulling monocrystals of Silicon;  
Germanium and III/IV compounds: Large sized blanks, crucibles (susceptors), heating elements, heat shields, current connecting parts, etc.;  
Brush plates for the production of carbon brushes, carbon brushes for electrical machines;  
Large sized blanks, graphite electrodes for Electrical Discharge Machining;  
Electrodes for chemical separation processes;  
Graphite anodes and cathodes for electrolysis of lithium, sodium, magnesium and fluorine;  
Liners (crucibles) for electron beam evaporation;  
Vessels and components made of graphite for chemical appliances;  
Heating elements for manufacturing optical fibers;  
Crucibles, supports for crucibles, heating elements for gas analysis;  
Bearings for gauge and control systems;  
Graphite blanks for manufacturing heat exchangers;  
Linings, electrical heating systems, components, supports, charging rails, susceptors made of graphite for high temperature furnace construction;  
Charging systems and furnace equipments made of graphite for hardening processes;  
Bearings and seals for dishwasher pumps, washing machines and heating systems;  
Nozzles for high voltage switchgear;  
Graphite boats for liquid phase epitaxy;  
Scoops for injection of glass drops, molds and various accessory parts made of graphite for container glass production; graphite parts for technical glass production;  
Electrodes, heating elements for manufacturing high purity quartz glass production;  
Powder and graphite rods for diamond synthesis; heating elements, support parts for production of synthetic diamonds;

Graphite discs as heat sinks for X-ray anodes;  
 Operating materials for manufacturing of mechanical heart valves;  
 Seal rings, packing rings, steam joint rings, ball valve seals, metal sleeved rings, piston rod seals, vanes, metering rings and segments, turbine rings for mechanical seals;  
 Melting crucibles for non-ferrous and precious metals, rotors with shafts for homogenization of zinc melts;  
 Electrodes (grids) of graphite for plasma etching;  
 Blanks and graphite electrodes for deposition of polycrystalline silicon;  
 Bearings, seal rings, packing rings, vanes, rotors, housings for pumps;  
 Fluxing tubes, gas distribution and gas injection systems for purification of aluminum melts;  
 Plates and belts for run-out tables for aluminum profile extrusion;  
 Crucibles and boats for aluminum casting;  
 Electrodes for aluminum surface cleaning  
 Large sized blanks with a suitable coefficient of thermal expansion for SiC-coating, SiC-coated barrel, pancake and single wafer susceptors for Si-epitaxy;  
 Single wafer susceptors for various processes, e.g. rapid therm process (RTP), liquid phase chemical vapour deposition (LPCVD), etc.;  
 Large sized blanks, sandwich dies for pressure sintering, graphite dies and rods for production of diamond tools (i.e. drill tools for off-shore industry);  
 Charging plates, discs, charging systems and equipments for hard metal high temperature sintering and CVD coating processes;  
 Boats, crucibles and other containers, liners, heaters, heating tubes for powder metallurgy;  
 Slicing beams made of carbon and graphite for cutting monocrystal rods; and  
 Sliding elements such as bearings, bushings, piston rod bearings, lubricating pins, slides.

The Commission should note that, pursuant to SGL's new compliance policy, the company's customers will complete an annual certification. This certification will specify the uses to which each customer puts nuclear grade graphite purchased from SGL, and that the customer does not use the graphite for nuclear related purposes. In addition, the customer's certification will specify that the customer has established a tracking system through which SGL can monitor the graphite's use.



**Attachment G**  
**(Item 17—Description)**

**Extruded Graphite:** This graphite is available as round and rectangular blocks, with relatively fine grain size, and has good mechanical, electrical and thermal properties, with a preferential grain orientation and low ash content. Density, mechanical strength and oxidation resistance can be improved by means of further impregnation.

**Die-Molded Graphite:** A vibration molded fine grain graphite has an exceptionally homogenous structure, almost isotropic properties and low ash content. It can be manufactured in large sizes. Further processing, for example impregnation, is possible.

**Isostatically-Molded Graphite:** Isostatically pressed graphite is an especially fine grain, dense, isotropic graphite, which can be produced in larger dimensions.

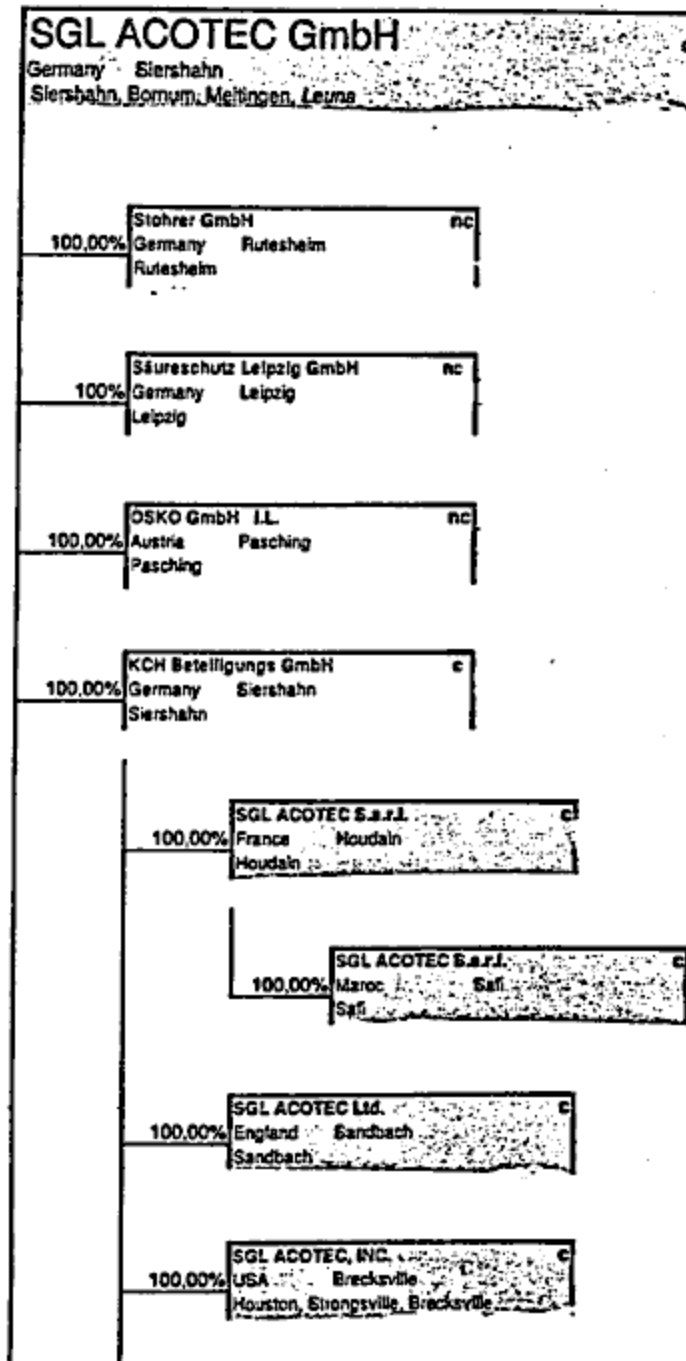
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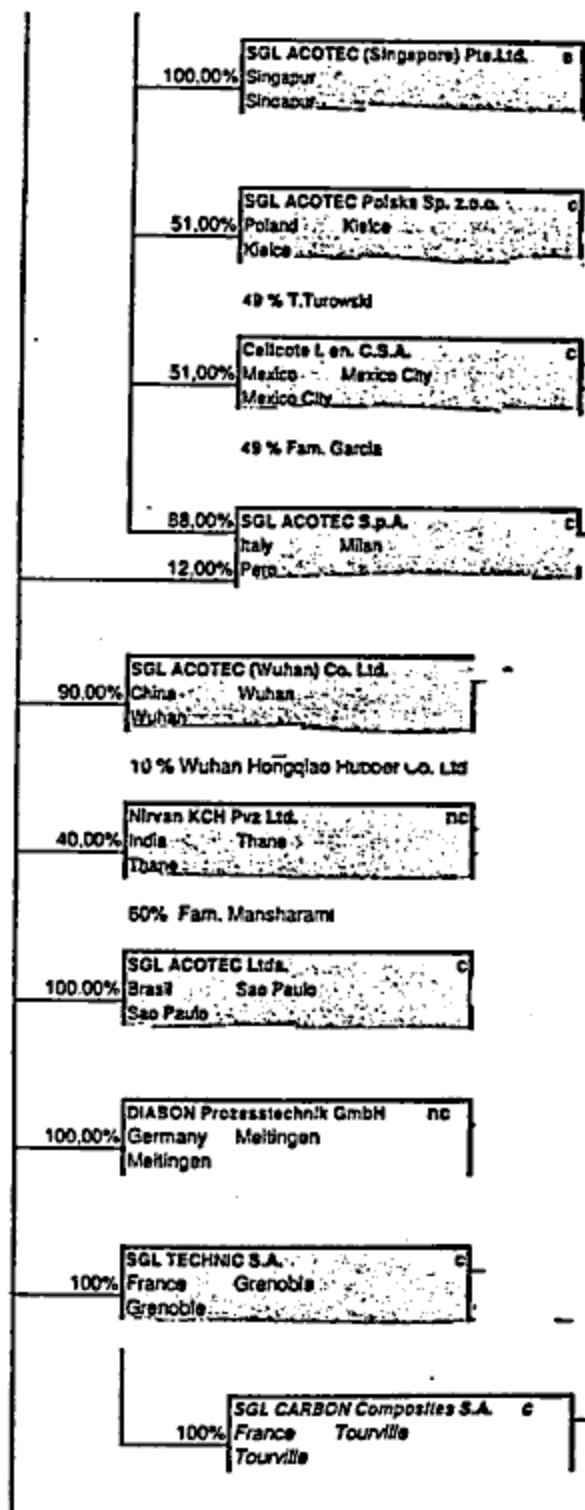
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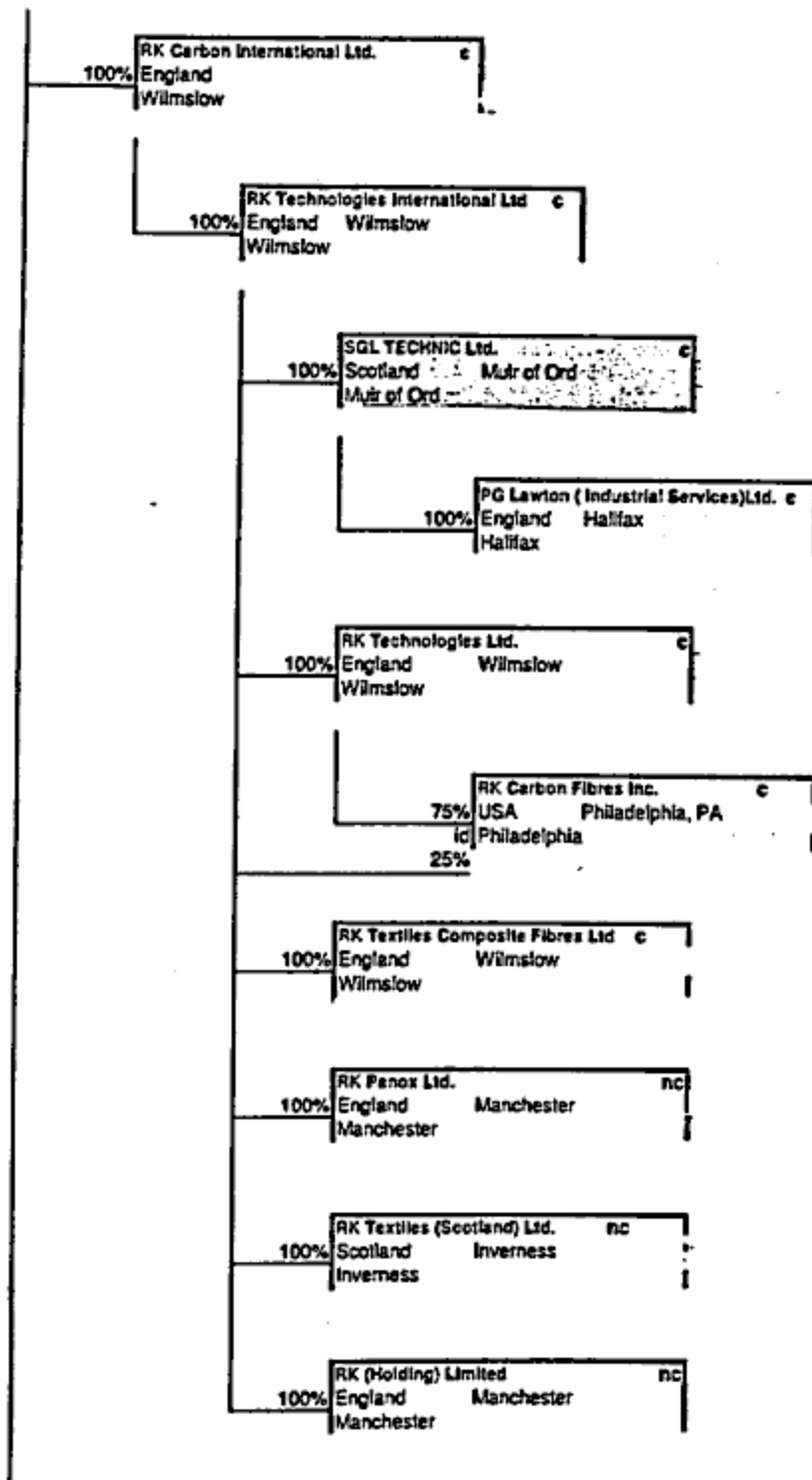
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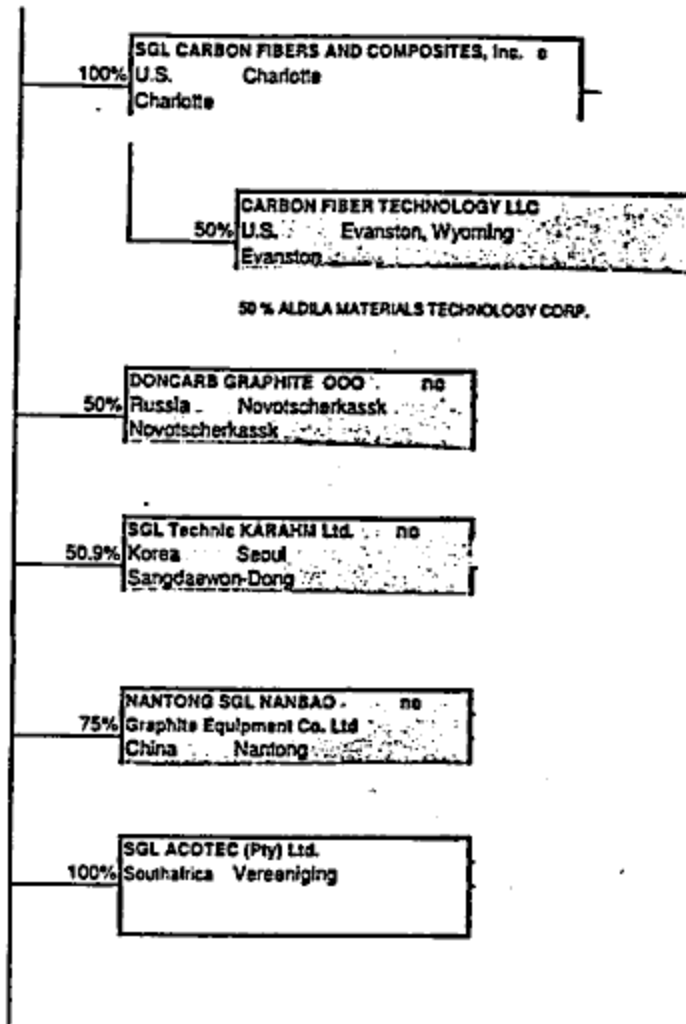
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SGL TECHNIK GMBH offices in:

Shanghai

# SGL CARBON GROUP

as of: Jan 1st, 2002  
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05.09.2002

## SGL CARBON Aktiengesellschaft

Germany Wiesbaden  
Wiesbaden

100% SGL CARBON Beteiligung GmbH c  
Germany Wiesbaden  
Wiesbaden see separate chart

SGL CARBON LLC c  
USA Charlotte  
Charlotte etc. see separate chart

100% SGL ACOTEC GmbH c  
Germany Siershahn  
Siershahn, Bornum, Meltingen, Leuna see separate chart

100% SGL CARBON GmbH c  
Germany Meltingen  
Meltingen, Bonn, Griesheim

88.2% ZEWSA c  
Poland Raciborz  
Raciborz

9% held by SGL Poland

99.70% SGL CARBON S.A. c  
Belgium Engis  
Engis

consolidated up to June 2002

100% SGL CARBON GmbH c  
Austria Steeg  
Steeg

99.83% SGL CARBON GmbH & CO c  
Austria Steeg  
Steeg 0.17%

100% SGL CANADA Inc. c  
Canada Lechute  
Lechute

100%	SGL CARBON S.A. France Chedde Chedde	c)
*) consolidated up to June 2002; since July 2002 nonconsolidated		
100%	SGL PanTrac GmbH Germany Berlin Berlin	c)
64%	Gelter-Ringsdorf S.A. Spain Madrid Madrid	nc
100%	SGL CARBON s.r.o. Czechia Stary Pizenec-Sedlec Stary Pizenec-Sedlec	nc
100%	SGL CARBON Finance Ireland Dublin Dublin	c)
100%	SGL CARBON Ltd. England Alcester Alcester	c)
100%	SGL CARBON Pty. Ltd. South Africa Vereeniging Johannesburg	nc
100%	SGL CARBON Japan Ltd. Japan Tokyo Tokyo	nc
70%	SGL CARBON Korea Ltd. Korea Seoul Seoul	nc

100%	SGL CARBON do Brasil Ltda. Brazil Diadema Diadema	nc
	Unice: Venezuela	
100%	SGL CARBON ASIA-PACIFIC SDN.BHD Malaysia Kuala Lumpur Kuala Lumpur	nc
	SGL CARBON ASIA-PACIFIC office in:	Taipei
	SGL CARBON ASIA-PACIFIC office in:	India
	SGL CARBON ASIA-PACIFIC office in:	Shanghai
100%	SGL CARBON Sdn. Bhd. Malaysia Kuala Lumpur Kuala Lumpur	nc
100%	SGL CARBON Hong Kong Ltd. China Hong Kong Hong Kong	nc
51%	SGL TOKAI CARBON Ltd. China Shanghai Shanghai	nc
100%	SGL Graphite Specialties (Far East) Ltd. China Shanghai Shanghai	nc
100%	SGL Information Services GmbH Germany Augsburg Augsburg	c
100%	SGL TECHNOLOGIES GmbH Germany Mellingen Mellingen	c
100%	SGL Brakes GmbH Germany Mellingen Mellingen	c

SGL CARBON AG offices in:

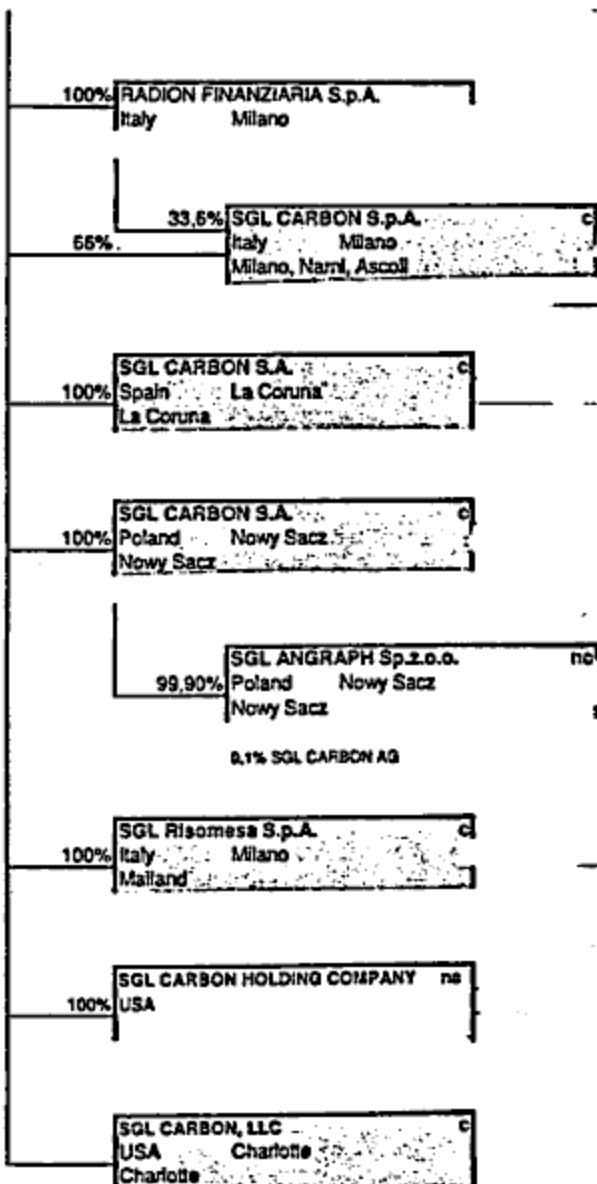
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# SGL CARBON GROUP

as of: Jan 1st, 2002

**SGL Beteiligung GmbH**  
Germany Wiesbaden



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# SGL CARBON GROUP

as of: Jan 1st, 2002

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**SGL CARBON, LLC\***  
USA Charlotte  
Charlotte, Morganton, Niagara Falls<sup>1</sup>, Hickman, Ozark, St. Marys,  
Dallas, Hillsboro

\* sole member is SGL CARBON Metelligung GmbH

100% SGL TECHNIC Inc. c  
USA Valencia  
Valencia, Arkadelphia

100% 9012-9577 Quebec Inc. c  
Canada Montreal  
Montreal

100% SPEER CANADA Inc. c  
Canada Kitchener  
Kitchener (Ontario)

100% SGL HITCO ACQUISITION Corp. c  
USA Charlotte  
Charlotte

94.00% HITCO CARBON COMPOSITES, Inc. c  
USA  
Gardena

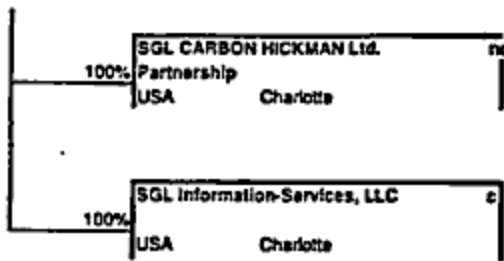
100% M.G.P., LLC\* c  
USA Robesonia  
Robesonia, Womelsdorf

\* sole member SGL CARBON LLC

100% Great Lakes Graphite Corporation nc  
USA Charlotte  
Charlotte

100% CMS GRAPHITE, LLC\* c  
USA Cheshire  
Cheshire

sole member SGL CARBON LLC



Gen. Partner:  
Ltd. Partner:

SGL CARBON LLC  
Great Lakes Graphite Corp.

November 21, 2002



SGL CARBON GROUP

RE: Specific License Applications for SGL Carbon, LLC

Director for Nonproliferation, Exports, and Multilateral Relations  
Office of International Programs  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20037

Dear Sir/Madam:

I enclose two completed applications for specific licenses authorizing SGL Carbon, LLC to export nuclear grade graphite pursuant to 10 C.F.R. §110.25. These applications cover: (1) exports to SGL's affiliate in Canada; and (2) exports to other locations. Two checks in the amount of \$5800.00 each representing the application fees are also enclosed. I would appreciate your assistance in processing these applications as quickly as possible. To facilitate your review of our applications, this letter provides some additional information about SGL, its products and operations that the application form did not request.

SGL is a member of the SGL Carbon Group, the world's largest manufacturer of carbon, graphite and composite materials for industrial and aerospace applications. The Group has 40 locations worldwide, with its headquarters in Wiesbaden, Germany. SGL Carbon, LLC is headquartered in Charlotte, North Carolina, with manufacturing plants in Morganton, North Carolina, Saint Marys, Pennsylvania, Ozark, Arkansas, and Hickman, Kentucky. The company and its affiliates employ over 1,200 workers in North America. The Group is organized into four business units: the Carbon and Graphite Business Unit, the Graphite Specialties Business Unit, the Corrosion Protection Business Unit, and SGL Technologies. The activities of the Graphite Specialties Business Unit are most relevant to this application.

The Graphite Specialties Business Unit (GSBU) in North America imports, makes, and exports a variety of products comprised of carbon, graphite, metalized graphite, treated graphite, and coated graphite. The GSBU deals in very high purity graphite. Utilizing the method prescribed by the American Society for Testing and Materials in standard C1233-93, the boron equivalent content of all untreated graphite products of this unit is less than five parts per million. Except for graphite powders, these graphites also have a density greater than 1.5g/cm<sup>3</sup>. Thus, all untreated, solid graphite products sold by the GSBU are nuclear grade graphite. Each of the business lines within the GSBU exports products, most of which are completely fabricated for ultimate end-use and therefore may be exported under a general license. Certain products, however, could fall into categories that require a specific license under the Nuclear Regulatory Commission regulations. These products are either bulk graphite, or partially finished products which could be considered either bulk or fabricated products under the regulations.

**SGL CARBON, LLC**

8600 Bill Fielden Drive  
Charlotte, NC 28269  
Mailing Address:  
P.O. Box 563960  
Charlotte, NC 28256-3960  
Phone: (704) 593-5100  
Fax: (704) 593-5117

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The GSBG uses three basic methods to form graphite products: extrusion, conventional molding and isostatic molding. Isostatically molded graphites are all produced in Germany by an SGL affiliate and are then exported in containers to SGL in bulk to hold at its facility in St. Marys, Pennsylvania. The "iso" graphites are then either fabricated at St. Marys into end products or exported. One of the enclosed licenses covers exports to Speer Canada, Inc., an SGL affiliate in Canada. The other license application covers exports to customers and SGL affiliates in countries other than Canada, including countries of the European Communities, Mexico, certain countries of South America, and others. The initial export from Germany of iso graphites is authorized by a German and a European Communities license.

Speer Canada, Inc. depends on nuclear grade graphite imported from SGL and other members of the Group for its economic survival. Speer Canada does not have the capacity to make enough graphite for all of its customers. It is also preparing an application for an export license from Canada to authorize its export of nuclear grade graphite products.

In the past, although SGL recognized that the NRC regulations existed and attempted to conform its exports to their requirements, it had difficulty interpreting them. Because of this difficulty, the company may have made shipments without a required specific license. When this possible noncompliance surfaced this fall, SGL stopped exporting all types of nuclear grade graphite and conducted an internal investigation. SGL has since made a voluntary telephone self-disclosure to the Commission's Office of International Programs, and will shortly submit a written disclosure. It has resumed exporting fabricated end products not intended for nuclear-related purposes.

In the meantime, SGL's exporting of bulk, nuclear grade graphite and some partially fabricated nuclear grade graphite remains at a halt. Obviously, SGL's business has suffered since it ceased exporting these graphite products. Each day that this inactivity continues proves more detrimental to SGL's ability to do business, and maintain its workforce at the current level. Therefore, we request that you review these applications as soon as possible. We further ask that both specific licenses be issued in a timely manner; however, the issuance of either license will benefit SGL. Thus, if the Canadian license can be issued sooner than the license for other locations, SGL would appreciate your prosecuting that matter.

As you consider these applications, SGL would like to clarify its responses to certain items. Because of the structure of the Group and nature of its business activities, SGL does not foresee a certain date upon which its need for regular shipments would change. Thus, SGL's license applications do not specify a first or last shipment date, nor a contractual delivery date (See Items 5-7 on the applications).

The applications also request that the specific license be issued indefinitely (See Item 8). If the Commission considers it necessary, the license could be deemed to expire upon SGL's dissolution. Alternatively, SGL asks that the license renew automatically year to year.

We appreciate your attention to these applications, and we look forward to resuming exporting activities. SGL is happy to provide any additional information that will inform your decision. Please feel free to contact our attorney, E. Thomas Watson, Esq., of Parker Poe Adams

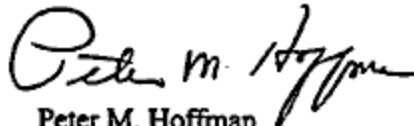
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& Bernstein, 401 S. Tryon, Suite 3000, Charlotte, NC 28202, (704) 335-9037, with any comments you have.

Sincerely,



Peter M. Hoffman  
President

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